Summary of Benefit-Cost Analysis of Justice Center and McCaw Performance Hall
(Conducted for OSE by SBW Consulting)

Goals

- Estimate life-cycle benefits and costs of achieving "silver LEED" at Justice Center and McCaw Hall
- Provide credible, useful benefit-cost information and feedback for City's Sustainable Building Program and other developers/building owners/architects

Methodology

- Gathered information/data from project managers, utilities, design firms, etc.
- Interviewed project managers extensively
- Consulted LEED reference materials, commissioning studies, literature, etc.
- Estimated incremental benefits and costs
  - distinguished between primary benefits (e.g., energy and water savings) and secondary benefits (e.g., increased productivity)
  - separated out general fund- vs. utility-borne costs
  - used very conservative assumptions to calculate productivity benefits

Results

- 43% of LEED points considered standard practice (e.g., meeting new energy code); 57% represented going "above and beyond" standard practice
- LEED actions included:
  - @ Justice Center: buffer wall, light shelves, green roof
  - @ McCaw Hall: improved construction debris recycling, indoor air quality management
  - @ both: energy efficiency, indoor environmental quality improvements, commissioning

	McCaw Hall	Justice Center	Combined
Cost	$909,000	$1,728,000	$2,637,000
% of Project Budget	0.7%	1.9%	1.2%
Benefits (assuming 25-year life-cycle)	$582,000-$835,000	$2,557,000-$3,708,000	$3,138,000-$4,543,000
Benefit-Cost Ratios (@ 2% and 6% discount rates)			
Primary benefits only	0.79-1.14	0.77-1.10	0.78-1.11
w/secondary benefits	0.74-1.07	1.93-2.80	1.49-2.16
w/utility incentives	0.64-0.92	1.48-2.15	1.19-1.72

Conclusions

- LEED cost-effective overall for both projects combined
- Cost-effectiveness somewhat lower at McCaw Hall because of lower occupancy rate (and therefore lower productivity benefits)
- Uncertainties in analysis; need to evaluate actual performance of buildings